

Office of Water News Clips – February 6, 2014

EARTHQUAKES: Texas oil and gas agency begins interviewing for seismologist post

Outlet: E&E News PM

Texas oil and gas officials began interviewing job candidates today for a new seismologist expected to help the state look at the link between oil and gas activities and earthquakes in North Texas.

"Interviews are starting today for that position," David Porter, one of the three commissioners who run the state's oddly named oil and gas agency, the Texas Railroad Commission, said on Capitol Hill today.

Porter was testifying before the House Science, Space and Technology Committee at a hearing called "Examining the Science of EPA Overreach: A Case Study in Texas."

Rep. Marc Veasey (D-Texas), a committee member, had asked about the earthquakes. He said they had created a lot of concern in Azle, Texas, and "not just from people who are liberals."

The Railroad Commission agreed to hire a seismologist after more than 800 people turned up at a town hall meeting Porter called about the earthquakes. Many of those who attended were critical of the state's slow response to the quakes.

Geologists have known for decades that injecting any kind of industrial fluid deep underground can lubricate faults and unleash earthquakes. The shale boom in Texas and other parts of the country is driven by high-volume hydraulic fracturing, which creates millions of gallons of wastewater. The fracturing itself is not believed to cause damaging earthquakes, but much of the wastewater from fracked wells gets injected deep underground.

U.S. Geological Survey seismologists said in 2012 they were seeing a "remarkable" increase in earthquakes in the middle of the country.

Azle, about 20 miles northwest of Fort Worth, has been shaken by about 30 earthquakes since early November. Some have been as strong as magnitude 3.6. There are at least three active injection wells near Azle, which sits atop the Barnett Shale natural gas field, and many people in the area believe the earthquakes are related to the disposal wells.

No injuries or major damage have been reported from the earthquakes, though some residents say the shaking has caused cracks to appear or grow worse in their homes' walls and foundations.

Even before the quakes in Azle and Timpson, Texas, the state had some of the best-documented seismic activity around injection wells. Three injection wells in the Dallas area have been voluntarily shut down by the operator after earthquakes nearby. University of Texas professor Cliff Frohlich linked injection to 24 small earthquakes around Cleburne, Texas, from 2009 to 2011. That indicated that disposal wells in the Barnett Shale might be causing more quakes than previously thought.

U.S. EPA has been tentative in its approach to the issue of earthquakes and disposal wells. EPA regulates

disposal wells under the Safe Drinking Water Act. It began a study of the issue in 2011, but the effort has stalled and the agency has no plans to release any findings.

NC river turns to gray sludge after coal ash spills from Duke Energy pond

Outlet: Star Tribune - Online

Canoe guide Brian Williams dipped his paddle downstream from where thousands of tons of coal ash has been spewing for days into the Dan River, turning the wooden blade flat to bring up a lump of gray sludge.

On the riverbank, hundreds of workers at a Duke Energy power plant in North Carolina scrambled to plug a hole in a pipe at the bottom of a 27-acre pond where the toxic ash was stored.

Since the leak was first discovered by a security guard Sunday afternoon, Duke estimates up to 82,000 tons of ash mixed with 27 million gallons of contaminated water has spilled into the river. Officials at the nation's largest electricity provider say they cannot provide a timetable for when the leak will be fully contained, though the flow has lessened significantly as the pond has emptied.

An Associated Press reporter canoed downstream of the spill at the Dan River Steam Station and saw gray sludge several inches deep, coating the riverbank for more than two miles. The Dan had crested overnight, leaving a distinctive gray line that contrasted with the brown bank like a dirty ring on a bathtub.

Williams, a program manager with the Dan River Basin Association, worried that the extent of the damage might not be fully understood for years.

"How do you clean this up?" he said, shaking his head as he churned up the ash with his paddle. "Dredge the whole river bottom for miles? You can't clean this up. It's going to go up the food chain, from the filter feeders, to the fish, to the otters and birds and people. Everything in the ecosystem of a river is connected."

Environmental regulators in North Carolina say they are still awaiting test results to determine if there is any hazard to people or wildlife. Coal ash is known to contain a witch's brew of toxic chemicals, including lead, arsenic, mercury and radioactive uranium.

Twenty miles downstream from the spill site and across the state line in Danville, Va., worried fishermen watched ash swirl in the water. A woman dipped her hand into the water and it came out coated slate gray.

Municipal officials in Danville say they are successfully filtering out contaminants in the drinking water for the city of about 43,000 people.

Meanwhile, officials in Virginia Beach, Va., announced they had stopped drawing water from Lake

Gaston, a major reservoir fed by the Dan.

Personnel from Duke Energy and an alphabet soup of state and federal agencies, including the U.S. Environmental Protection Agency and U.S. Fish and Wildlife Service, traveled the river in motorboats Wednesday, collecting water and sediment samples. A command center has been set up at the power company's facility in Eden.

An EPA spokeswoman did not respond to questions Wednesday, including when the test results on the samples collected by the agency would be made public.

Environmentalists and government regulators have been warning for years that the 31 ash ponds at Duke's power plants in North Carolina had the potential for calamity, especially after a similar pond in Kingston, Tenn., burst open in 2008.

"Even without a spill, these settling ponds have been releasing continuous contamination into the rivers downstream from coal-fired power plants," said Avner Vengosh, a professor of geochemistry at Duke University, which was named for the same family that founded the power company.

Duke Energy officials have always insisted the ponds at its facilities were well-engineered and safe. At the Dan River plant, the waste pond was expanded more than 40 years ago over an older storm water drainage pipe. That pipe, which empties into the river, collapsed without warning sometime last weekend, draining the pond above.

Duke has closed 14 of its oldest coal-burning power plants in recent years as more-stringent air quality regulations went into effect and the price of cleaner-burning natural gas has dropped. Though the coal-fired turbines at the Dan River facility were shut down in 2012 and replaced with an adjacent gas-burning plant, the company currently has no firm plans for when and how to clean up the remaining ash ponds.

"We are committed to closing the ash basins at many of our retired coal plants across North Carolina," the company said in a statement Wednesday. "Duke Energy customers continue to benefit from more affordable rates because coal remains part of our diverse fuel mix."

Danny and Elsie Crews sat in their truck at a riverside park in Danville, watching the ashy water flow by. Danny, 60, said he helped build the new gas turbines at the Duke plant in Eden before giving up construction work due to health problems.

Groups ask NJ to toughen rules on storm pollution

Outlet: Seattle Post-Intelligencer

Several environmental groups are asking New Jersey officials to do a better job of limiting water pollution caused by storm runoff.

Permits issued by state government for municipal sewer systems, highways, developed sites and other structures should have tougher standards before they are up for renewal at the end of February, the groups said in a recent petition to the state Department of Environmental Protection.

They want stronger requirements to capture polluted runoff using "green infrastructure" such as rain gardens, roadside plantings, and permeable pavement.

"For decades we have had numerous studies that have determined that too much stormwater pollution is entering our waterways and negatively affecting the public's use of these resources, especially Barnegat Bay," said Helen Henderson of the American Littoral Society, one of nine groups that petitioned the agency. "This is an opportunity to protect the environment and the economy that relies on clean water."

The groups said this week's series of winter storms was a good example of how pollutants regularly make their way into New Jersey waterways. As rain and snow melt flow across property, they wash oil and grease, pet waste, fertilizer, pesticides, bacteria, trash, and other pollutants into waterways, the groups said. Stormwater runoff is the largest source of water pollution in New Jersey, they said.

Larry Hajna, a spokesman for the state Department of Environmental Protection, said the state's permits comply with the federal Clean Water Act and include standards that exceed what the U.S. Environmental Protection Agency requires. He said the department will meet with various groups as it updates its stormwater permit program.

"The DEP has long recognized the significant impact that stormwater runoff has on water quality," Hajna said. "This is especially important in New Jersey because we are so densely populated."

He said the state agency promotes green infrastructure, such as green roofs, permeable pavement and stormwater control technologies, in reviewing projects, and he noted that the state adopted the nation's toughest fertilizer standards as part of a package to help Barnegat Bay.

Environmentalists hailed that move, but say much more needs to be done.

Nitrogen, phosphorus and carbon in stormwater pollution are the primary cause of low dissolved oxygen in many New Jersey waterways, they said. Low dissolved oxygen can suffocate or drive away many species that live in the water and which build the base of the ecological food chain. Stormwater is also a primary source of bacteria and viruses that can make water unsafe for human contact.

"The ocean is at the receiving end for all polluted runoff entering waterways," said Cindy Zipf, executive director of Clean Ocean Action. "It is time to update and strengthen the stormwater rules to ensure that they will improve water quality. Our quality of life, coast, and economy depends on it."

Besides Clean Ocean Action and the American Littoral Society, the groups included Hackensack Riverkeeper; NY/NJ Baykeeper; Delaware Riverkeeper Network; Pinelands Preservation Alliance; Stony Brook-Millstone Watershed Association; New Jersey Environmental Lobby; and the Natural Resources Defense Council.

Feds don't plan to sample water in homes

Outlet: Charleston Gazette - Online, The

Federal officials who are visiting West Virginia today appear to have no plans for additional water sampling to determine if Crude MCHM from the Jan. 9 Elk River spill is still inside home plumbing systems across the region.

In interviews Tuesday, neither the U.S. Environmental Protection Agency nor the Centers for Disease Control indicated that they would conduct such tests or push the Tomblin administration to do so.

CDC officials said any such testing or advice to the state would be up to EPA. And EPA officials indicated that they are comfortable with the state's current testing, which does not include tap water inside residences.

In recent days, West Virginia residents have increasingly been asking why state officials from the Department of Health and Human Resources or the National Guard are testing water for Crude MCHM only at the water treatment plant, at fire hydrants and in some public buildings, such as schools.

EPA and CDC officials are to arrive in West Virginia today to meet with Gov. Earl Ray Tomblin, and then have a press conference to "provide an update -- in detail -- on what we have accomplished, where we stand now, and what actions we are taking as we move forward," according to Tomblin spokeswoman Amy Goodwin.

Several outside experts have expressed concern that the MCHM and other chemicals from the spill could have been absorbed by home plumbing systems, where it could continue to leach into water - even if in very small amounts -- for some undetermined amount of time.

Andrew Whelton, a University of South Alabama environmental engineer, has been testing water from area homes and arguing publicly that more information is needed about how chemicals from the spill interact with varying types of home pipes and tanks.

In an email interview Tuesday night, Whelton said that the Obama administration is making a mistake by not pushing for or conducting its own broader study of MCHM's presence in homes impacted by the spill.

"Chemical exposures occur inside homes at kitchen faucets, showers, etc., not at a hydrant," Whelton said. "Plumbing systems do not operate the same as buried pipe networks. There are clear differences."

Last week, Whelton was awarded a \$50,000 emergency grant from the National Science Foundation to study the way the Crude MCHM from the spill acts when it enters home plumbing systems.

In announcing the grant, a National Science Foundation official called the Elk River spill "one of the largest human-made environmental disasters in this century." The foundation said that one of the central unknowns about the spill's long-term impacts is how the chemicals interact with home plumbing systems.